



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,969	07/15/2003	J. Erik Hitzelberger	380-115	7835
1009	7590	02/06/2006	EXAMINER	
KING & SCHICKLI, PLLC 247 NORTH BROADWAY LEXINGTON, KY 40507			TILL, TERRENCE R	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5

Office Action Summary	Application No.	Applicant(s)	
	10/619,969	HITZELBERGER, J. ERIK	
	Examiner	Art Unit	
	Terrence R. Till	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-36 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/11, 18, 2005</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 1/11/05 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because some of the foreign prior art references are not complete copies. Those references have been lined through. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Specification

2. The disclosure is objected to because of the following informalities: On page 13, it is requested that applicants update the status of PCT application PCT/US01/47401. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1744

4. Claims 1-22 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With respect to independent claims 1 and 13, applicants have recited an agitator mounted in the agitator cavity for rotation in either a forward bottom-dead-center direction as said floor care apparatus is **pulled rearward** by an operator and a rearward bottom-dead- center direction as said floor care apparatus is **pushed forward** by the operator. This is in direct contradiction to the specification which states that the brush is rotated in a forward-bottom-dead-center direction when pushed forward and rotated in a rearward bottom dead-center-direction when the nozzle is pulled rearward (see page 11). Thus it is not clear what applicants are attempting to claim since the scope of the claims does not match the specification. With respect to claim 24, the preamble of claim 23 recites “a method of cleaning a nap carpet..”, but the preamble of claim 24 recites “the method of propelling the nozzle assembly”. This is confusing since the scopes of the claims differ in the preamble.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

Art Unit: 1744

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-4, 6-15, 18-25 and 30-36 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 10/383,927 in view of Hirano et al. (cited in IDS). Although the conflicting claims are not identical, they are not patentably distinct from each other because With respect to the present application, independent claims 1, 12, 20 and 22 of the '927 application each recite, inter alia, an agitator mounted in the agitator cavity for rotation (a) in a first direction for drawing said nozzle assembly forward and (b) in a second direction for drawing said nozzle assembly rearward. Independent claims 1, 13, 23 and 25 of the present application all recite, inter alia, an agitator mounted in the agitator cavity for rotation in either a forward bottom-dead-center direction as said floor care apparatus is pulled rearward by an operator and a rearward bottom-dead-center direction as said floor care apparatus is pushed forward by the operator. The other limitations of the independent claims of both applications being identical. Thus the difference between independent claims of the applications is the direction of rotation of the agitator when moved in a forward or rearward direction. The patent to Hirano et al. discloses a controller 29 programmed to drive said brush drive motor in either of said first direction and said second direction dependent upon a signal received from said actuator, said controller is programmed upon a change of state of the actuator signal to remove power from said drive motor and to reapply power (almost instantaneously) to said drive motor such that the agitator is rotated in a different direction. In this case the controller 29 drives the agitator 12 in a forward bottom-dead-center direction as said floor care apparatus is pulled rearward by an operator and a

rearward bottom-dead-center direction as said floor care apparatus is pushed forward by the operator. It would have been obvious to a person skilled in the art at the time the invention was made to modify independent claims 1, 12, 20 and 22 of the '927 application to have the agitator rotate in a forward bottom-dead-center direction as said floor care apparatus is pulled rearward by an operator and a rearward bottom-dead-center direction as said floor care apparatus is pushed forward by the operator, in order to assist the user in pushing/pulling the vacuum.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 4, 6, 7, 11, 13, 16, 18, 19, 25, 28, 30, 31 and 35 are rejected under 35

U.S.C. 102(b) as being anticipated by Hirano et al. (cited in IDS).

10. The patent to Hirano et al. discloses a vacuum cleaner, comprising: a canister assembly 1 including a collection vessel; a suction generator; a nozzle assembly 5, said nozzle assembly including a housing H defining an agitator cavity and an agitator 12 mounted in the agitator cavity for rotation in a first direction for drawing said nozzle assembly forward and in a second direction for drawing said nozzle assembly rearward; a drive motor 17 for driving said agitator, and an actuator 35 for controlling operation of said drive motor and rotation direction of said agitator. The nozzle assembly further includes a belt and pulley assembly 16,18,19 connecting said drive motor to said agitator, a controller 29 programmed to drive said drive motor in either

of said first direction and said second direction dependent upon a signal received from said actuator. The controller 29 drives the agitator 12 in a forward bottom-dead-center direction as said floor care apparatus is pulled rearward by an operator and a rearward bottom-dead-center direction as said floor care apparatus is pushed forward by the operator. Said controller is programmed upon a change of state of the actuator signal to remove power from said drive motor and to reapply power (almost instantaneously) to said drive motor such that the agitator is rotated in a different direction and wherein said collection vessel is selected from a cup and a bag- as this covers essentially every type of dust receptacle.

11. Claims 23 and 24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Japanese patent to Hayashi et al.

Claim Rejections - 35 USC § 103

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 2, 3, 14, 15, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano et al. (cited in IDS) in view of EPO publication to Nishimura et al. (cited in IDS).

15. The patent to Hirano et al. discloses the claimed invention except that the motor driving the agitator is outside the agitator instead of positioned within the agitator. The publication to Nishimura et al. shows that an agitator having the motor positioned within and coaxial to the agitator is an equivalent structure known in the art. Therefore, because these two agitator drives were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the belt drive of Hirano et al. for the internally driven agitator of Nishimura et al.

16. Claims 5, 17 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano et al. (cited in IDS) in view of Beach.

17. The patent to Hirano et al. discloses the claimed invention except that the motor drives the agitator by a belt instead of by a gear drive assembly. The patent to Beach shows that an agitator driven by a gear assembly 24, 25 is an equivalent structure known in the art. Therefore, because these two agitator drives were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the belt drive of Hirano et al. for the gear drive of Beach.

18. Claims 8, 9, 20, 21, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano et al. (cited in IDS) in view of Japanese patent to Yamasato.

Art Unit: 1744

19. Hirano et al. does not disclose the controller is programmed to delay the reapplication of power to said drive motor. The Japanese patent to Yamasato discloses a vacuum cleaner having a rotary agitator 13,14 whose direction can be reversed by a control mechanism 67. The mechanism includes a circuit that is programmed to delay the reapplication of power to said drive motor (see English translation of constitution). Therefore, because these two agitator control circuits were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the controller of Hirano et al. for the controller of Yamasato in order to prevent breakdown of the motor due to over current in changeover (reversing rotation). With respect to claims 9, 21 and 33, Although Yamasato does not state how long it takes, it is considered within the purview of one skilled in the art to have the delay in reapplication of power to the drive be .1 to 1 seconds since this can be controlled by what capacitors are used in the device of Yamasato.

20. Claims 12 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano et al. (cited in IDS) in view of Murphy et al. '868.

21. The patent to Hirano et al. discloses the claimed invention except that Hirano et al. does not disclose the canister contains a cyclonic separator. Hirano is believed to just have a filter type bag or cup. The patent to Murphy '868 shows a canister-type cleaner in which there is a cyclonic separator D,F. Therefore, because these two dirt separation devices were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the separator member of Hirano et al. for the cyclonic separator of Murphy '868.

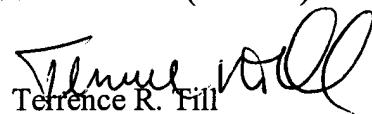
Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Japanese patents to Ebara et al. and Akamatsu et al. disclose vacuum cleaners that can reverse the agitator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Terrence R. Till
Primary Examiner
Art Unit 1744

trt